/66 cont./

245 prevent the seedlings from withering. According to the Miao the tea plant is very sturdy and can resist the cold. It blooms in the ninth and tenth months, the flowers being white in color, and fading in the eleventh month. After the second and third [262] months, "blisters /p'ao/" form, which can be picked and eaten. [443] They taste sweet and sour, and are often sold by the Miao [439] women at the market place. During the seventh and eighth months the fruits ripen, and after being picked they are dried in the sun for three or four days. They split open themselves, disgorging two or four seeds. [258] The seeds also must be dried in the sun in order tomake them dry and crisp, so that they will not get wormy and to insure a lot of oil when expressed.

258 Tung and tea seeds both yield oil. The Miao sell these [459] seeds to the Chinese oil stores, few Miao people expressing the oil themselves. The few who do express tea oil still use a local [412] method. The sun-dried tea seeds are pounded into bits in a mortar. Then they are dry-fried in a pan. Then water is added and brought to a boil. As bubbles of oil float on the surface of the boiling water, they are scooped out with an iron ladle and [415] placed in a bowl. The bubbles of oil are heated again to make the water evaporate, and the residue is tea oil. The residual paste of the tung or tea seeds after the oil has been expressed [241] is called tung paste or tea paste respectively. The tung paste [388] can be used as fertilizer. The tea paste can be used as soap for laundry and also can be ground into powder to be thrown [224] into the river to cause fish to suffocate so that they can be caught easily.

314 Wild indigo plants grow abundantly everywhere in the Miao [249] area. Although the Miao know how to cultivate indigo plants, they also gather wild indigo for dyeing. Wild indigo plants are one to two kung ch'ih in height. A big one has a stalk as thick as a man's thumb, a lone plant without any side branches, reaching toward the sky. The leaves are small and oval in shape, and contain a great deal of indigo. Every year in the eighth and ninth months when the weather is still warm and before the frost comes, the indigo leaves are at their most luxuriant. The Miao go out in numbers to pick wild indigo leaves.

/66 cont./

000 386 leaves. After the picking, they cut the leaves into small pieces of about 40 kung fen, tie them in arm-thick bundles, and place them in a large earthenware jar filled with pure spring water, where they are completely submerged. After three days the jar of clear water becomes dark green in color. The indigo bundles are then removed, and lime water is added to the jar. The ratio is a bowl of lime water to a tan /picul/ of indigo water. The lime is first dissolved in water: the solution is kept and the residue discarded. After being mixed with the lime water the indigo water /67/ is stirred with a stick to blend it. The precipitation is indigo.

249 [314] [291] Although wild indigo grows everywhere, its output in the end is not large. Furthermore, the Miao, men and women, all wear blue cotton clothes. The supply of wild indigo naturally is not enough to meet the demand and domestic indigo has to be cultivated (Illus. 36). It is planted in the second and third months and harvested in the ninth and tenth months before the frost. The output of domestic indigo is larger than that of wild indigo. The Miao usually dig a hole about two kung ch'ih [386] deep for making indigo. The process is the same as that for wild indigo.

The Miao also plant sugar cane in the low-lying places in deep valleys. The land for this crop must have fine soil and dry. On the periphery as well as in the center of the field several ditches are dug for draining water in case of rain. To plant sugar cane, they cut the cane into short lengths of about three or four nodes, planting three or four of them together. When they grow up they become a cluster. The clusters are about half a kung ch'ih apart. At planting time the sections are put into the earth, with the top ends slightly slanting, which are also covered with earth. After half a month, when the sprouts come out, light fertilizer is added. When they grow to a height of half a kung ch'ih, fertilizer is again put on. In all they are fertilized four or five times, and each time the earth is weeded and the soil loosened. Four or five days after the first frost in the ninth or tenth month the crop may be

249 /67 cont./
harvested. After harvest the canes are tied up, 50 to a bundle,
249 and stored in earth pits about one kung ch'ih deep. The pits
251 are first lined with cane leaves, on which the sugar cane are laid in rows. More leaves are laid on top and then covered with dirt. Ventilation tubes are stuck in to ensure a free flow of air in order to prevent decay. On market day, the canes
[443] are carried to market for sale.

The Miao area also produces native tobacco. Beginning
249 with the tenth and eleventh months the Miao nurse tobacco
[343] seedlings. Above the seedbed a thatched shelter with a slanting roof is erected to protect the seedlings from frost and snow. After they sprout they are watered and fertilized with ashes, manure, or tung paste. Transplanting takes place in the following spring in the third and fourth months. Fields for tobacco cultivation have to be plowed very early to reduce insect pests,
[825] according to the Miao. The insect called t'u ch'a erh only eats tobacco plant roots. Tobacco seedlings are transplanted in rows, by first crushing the earth into powder by hand, then burying the roots of the seedling in the earth and pressing the earth tight around the plant. If the earth is dry, then it should be watered at the root and the stem. After three or five days some mild fertilizer may be applied. Insect pests are the worst enemy of tobacco. Besides the t'u ch'a erh, which eats the
[825] roots, green hoppers eat the leaves. So, in tobacco growing a great deal of labor is spent in catching insects, which has to be done in the early morning, for later the t'u ch'a erh dig through the earth and it is difficult to find them. The tobacco plant is never allowed to grow too high, and has to be clipped from time to time to ensure the growth of more full and firm leaves. During harvest time the tobacco leaves are cut down leaf by leaf, /Illustration 36 on p. 68/ /69/ and stacked up for one or two nights. Then they are tied up with straw ropes and hung up to dry in the sun, being taken indoors at night. If a good color is wanted, then in good weather they should be exposed outside overnight to absorb the dew. The resulting color will be a beautiful, golden yellow.

2:Ling & Ruey--98 E-5 (1933) 1947 AE5 Miao AE5

/68/

Illus. 36. Native indigo.

4:Michey E-5 (1940-?) 1947 AE5 Miao AE5

was held firm by projecting rods which rested on a board across the frame. From the yarn beam the warp proceeded across the horizontal bar of the lighter frame, through two heddles of the frame variety made of bamboo rods with hemp thread between them, which were suspended from a roller laid across the lighter frame or through holes pierced in it, by straw rope and vine tendrils. They were a little wider than the piece of cloth used in the back apron, and the threads were about a foot long. From the lower ends similar ropes led to the fronts of two pedals. Other ropes of the same kind led from the backs of the pedals to the horizontal brace at the back of the main frame. From the heddles the warp proceeded to a reed, also suspended from the lighter frame, thence to the cloth beam set in slots in uprights in the longitudinal brace of the main frame, its longitudinal pieces and projecting above. The cloth beam was then held firm by straw rope tied around it and the frame behind the upright on one side. There were laze-rods set in just behind the front board. 286

Shed and countershed were formed by depressing first one pedal and then the other. The weft was shot through by hand, wound on bamboo shuttles of the shape as shown in figure 11. The weft was beaten up with the reed. Most of the warp thread was rolled on the yarn beam, but some extended beyond and lay in a basket. The reed was made of two pieces of wood, between which could be set and fastened a removable frame like that of the heddles, but without eyes in the thread which stretched between. The weaver took hold of two vertical bars as she beat up the weft. The contrivance was suspended by ropes attached to those bars.

Women also cooked the paste and beans and shaped the glutinous rice cakes, distilled rice wine, ground the beans and made bean curd, including that mixed with pig's blood at the lunar New Year. They helped cut tobacco in the fields, cutting the leaves from the stalk in such a way as to leave a piece of it for a hook by which they fastened it into a rope of straw made as they went. These ropes were festooned across the fronts of the houses to dry, after which it was ready to smoke in their long-stemmed pipes. 462 252 249.

69: Lewis T-5 (1950) 1951 AM 1 Indochina
Miao AE5

249 But this family† was in its workaday clothes, as its head was very anxious to explain to Dupont. They had been away a week, working in their opium-poppy fields, and now they were on their way home for a flying visit. Dupont asked about a dog, and the head of the family invited us to come up and see for ourselves, as he had no idea who was home and who wasn't.

311 361 It was a long, slow climb up to the village, although the Meos, as they skipped along by our side, seemed in no way to notice the slope, nor their huge burdens. The coarse grass — usual legacy of Meo occupation — was replaced here by a noxious thorny scrub. For miles, in all directions from the village, nothing would grow but this ultimate of austere vegetations. This village was at the last stage before it would have to be moved. The fields under cultivation were now so far away that the villagers lived dispersed in temporary shelters where they worked. Very soon they would be too far from the village to return at all and it would be moved, ten or fifteen miles, always south; leaving behind the prairie grass and scrub. It only wanted the Mans to arrive here from Tonkin — the Mans cultivate on Meo lines between 1000 and 3000 feet — to reproduce eventually in Laos the denuded wilderness of southern China.

342 181 The Meo village consisted of nothing but a few most decrepit hovels. They were the lowest and the most barbarous examples of human dwellings that it would be possible to find. Why should the Meos be the most elegantly dressed and the worst housed people in the country? They are superb at the few handicrafts they undertake, but they just can't be bothered about how they are sheltered or how they sleep. There is no compulsion; no household genie — like those of the Mois — demanding high standards of order and cleanliness in the house; no canons of taste and refinement spreading slowly downwards from an idly exquisite aristocracy, since all Meos are kept hard at work; no spirit of bourgeois emulation, since this is total democracy, with no betters to imitate. The Meos have only themselves to please, and the result is anarchy.

In the hovel we were taken to, the contents of a thousand school-

† [i.e., a Meo family. -- Analyst]

[158 cont.]

361 "Méo" villages, the hygienic conditions in them are questionable
364 enough, especially during the winter when the temperature frequently drops [159] below freezing. The "Méo" spend the days and the nights of winter squatting or sleeping about the kitchen hearth and neglect to put any extra clothing on when they go outdoors. It is
164 clear that under these conditions the pulmonary maladies which have already been spoken of are extremely frequent and that they cause real havoc among the old people and the young children.

Smallpox frequently rages among the "Méo," but like all primitive people who are not poisoned by the abuse of medicines
[147] for generations, they react marvelously to the simplest remedies. In 1911, a serious epidemic of smallpox ravaged a very large vil-
[1751] lage in the region of Pha-Long, causing five or six deaths daily. All the inhabitants were vaccinated the same day, old and young, healthy persons or those already attacked. From that moment, no further deaths occurred.

Maize is the basic food of the "Méo." It is boiled, steamed,
262 or parched, or reduced to meal in order to be eaten in the form
[252] of cakes. The "Méo" also cultivate mountain rice, but like the
243 "Man," they are coming more and more to cultivate permanent irrigated rice fields, the working of which is easier and more remunerative. To this end they have taken over as much as possible of the favorable terrain, valley bottoms or sides of hillocks on which water may be brought by a simple canalization, and have laid out these areas into terraced rice fields where they often successively
[249] cultivate rice and opium. (See photos 135 and 428, Plate 43, showing the rice fields after the harvest, and photo 184, Plate 41, which shows a large rice field used for the cultivation of opium, the latter photo taken March 31, 1912.)

Aside from maize and rice, the "Méo" eat buckwheat and many
262 vegetables, which they cook in water with a little salt: potatoes,
[252] string beans, peas, beans, cucumbers, turnips, eggplants, pumpkins, and so on. The use of meat (fowl, game, domestic animals) is reserved for ceremonies and banquets, which the "Méo" never miss a chance for. They never eat horseflesh.

[159 cont.]

271 The "Méo" habitually drink water, but they make alcohol
273 from grain (distilled or fermented) which they often drink without the slightest moderation.

They smoke tobacco in the bamboo water pipe or in the long
276 pipe [160] with the small bowl and mouthpiece of porcelain, of a model analogous to that of the "Man" pipe.

They smoke opium in a very moderate manner. Big opium smokers are rare among the "Méo" of Upper Tonkin.

●[249] Sometimes they cultivate hashish, but never make use of it.

The "Méo" are, above all, farmers and they cultivate upon
241 their mountains the various grains and vegetables enumerated above.
311 They utilize to this end parcels of land capable of growing vegetation, even the tiniest, sides of knolls, shallow basins, clefts in the rocks.

The maize is sown in the fourth month and is spread about on
243 all the parcels which can be cultivated, often by clumps of two or three hills. The ground is scratched very lightly, with the plough or with the hoe. It receives a little manure at the exact spot where the seed will be deposited. The harvest takes place towards the eighth month. It is not unusual to see the fields planted to maize—
249 as we have seen above for certain irrigated rice fields — transform themselves into ground for the growing of opium, which is planted toward the ninth month, after the earth has been mixed with a few ashes. The opium harvest takes place the third month and the ground
[243] again is given over to the cultivation of maize or of sorghum. The buckwheat generally produces two crops a year.

248 The "Méo" also cultivate hemp, to which they consecrate their best areas of ground (bottoms of cirques or of valleys). The hemp is sown the fourth month and reaped the seventh month.

231 The "Méo" keep a few bees. They often have hives whose honey is used in cake-making.

They raise their numerous vegetables either in gardens laid
244 out near their cabins, or in the maize fields at the same time as the maize.

The agricultural implements consist of ploughs of a primitive
412 model with ploughshares of iron, and some hoes. For the harvest,
407 large scythes and billhooks are used.

[166]

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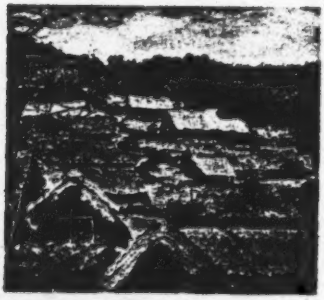
90. Frontier Post of Pha-Long ("Méo" Country).



347. Ho-to-tchay ("Méo" Village).

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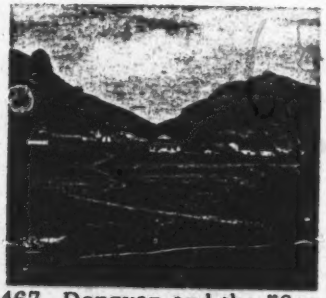
133

184. Opium Field Cultivated by the "Méo" on the Soil of Irrigated Rice Fields.



467. Dongvan and the "Sacred Wood."

241 eight ears. The stalks likewise are placed in piles in the fields, and then carried in as needed for bedding for the animals, heating, cooking food, or even building house walls.

The Meo grow little mountain rice and almost never plain's rice. The areas rarely lend themselves to the latter crop. However we have discovered, especially at Gi Chu Phin near Van Bu, magnificent mountain cirques whose slopes were decorated with terraced rice fields up to an altitude of one thousand meters.

A side from hemp, buckwheat, and opium, other crops are planted in the furrows of the fields of maize and among the stalks of that plant. This is done in such a way that the same field may produce at the same time beans, peas, pumpkins, broad beans, cucumbers and a grain called cao lien which serves to make flour and the bread eaten on holidays.

When the maize has been harvested, a crop of buckwheat is sometimes sown in the soil.

249 Opium is sown in November, the poppy seeds being mixed
248 with ashes to protect them from insects. The incisions are made in the plant in April or May, then once all of them have given up their opium, preparations are started for a crop of maize on the same soil.

Hemp is grown at the lowest spot in the cirques, because it requires very deep arable soil. It is sown in April and harvested in
245 July. Sorghum is sown and reaped at the same time as maize. Finally some peach, pear, apple, plum trees, etc., are almost always found around the cabin. Their fruit, although less well flavored than those of France, is still not to be scorned.

286 The Meo make their cloth themselves from the hemp which
412 they harvest. Some of them forge their work tools, spades, plough-
415 shares, pruning-hooks, hoes, etc., and buy crude iron which comes from Yunnan for this purpose. They make their ladles and buckets, furniture, sandals of bamboo fiber, pottery and, in short, all of their farming implements.

252 /140/ To grind maize they use a mill similar to the Coi xay
243 of the Annamese, but larger. The movable mill-stone here is activat
462 by a crank which is articulated with a system of horizontal spokes attached to a strong wooden bar. Three or four women operate this bar by drawing it towards them and away from the mill, and then by pushing it towards the mill. The picture afforded by this exercise is one of vigorous movement. The bodies of these strong daughters of the mountain bending, their return movement which shows a glowing

252 face, crowned with the halo of their wide turban, and a throat panting
243 with the effort just accomplished, together with their ballerina skirts
462 flapping about their bare legs-- the general effect of all this at the foot of a rocky cliff makes a picture to tempt the brush of a Millet.

Section 7

Way of Life--Intellectual State--
Religious Ideas--Custom Relating to Birth, Marriage, and Death--Religious Ideas

181 The Meo likes his independence very much. However, he is
177 less uncouth than the Man in his dealings with the French. It is not
609 impossible to make a soldier of him and the creation of the small posts,
701 linh co, of this race have been entirely successful. In 1904 about forty of them were incorporated into the "Tonkinese Tirailleurs" at Bao Lac, but this attempt gave less satisfactory results because of their antipathy to life in the barracks. In the future we should be satisfied with having them enter the police forces of the frontier.

871 The Meo, while somewhat crude, are not entirely without
153 intelligence. A school was founded in March 1903 at the military post of Phobang, made up of young Meo and Lolo, and at the end of a year most of them, and especially the Lolo, already were reading correctly and were beginning to write little phrases in French. From this experiment one might at last conclude that these peoples are capable of a certain intellectual culture.

262 /141/ The Meo's method of living is of the simplest. His usual
252 food is maize, he eats meat only on the occasion of festivities, but
415 then he is not forbidden to eat the flesh of the dog, as are the Man. Maize is cooked by steaming. It is eaten at home with an abundance of vegetables, but for meals while traveling, or in the fields, small cakes are made of it. A porcelain spoon is the only instrument used in bringing food to the mouth.

276 Although the cultivation of the opium poppy is very widespread
● [249] among the Meo, he uses very little of it himself. On the other hand, almost all smoke tobacco, either in a water pipe, or in a pipe similar to our own. The tobacco prepared by them looks like French tobacco, but is very much stronger. Neither men nor women chew betel. Far
301 from lacquering their teeth, they take a certain pride in having them
515 brilliantly white and go so far as to carry their tooth-brushes hanging from their necklaces.

/356 cont./

243 [251] stored on the platform over the hearth. In the second month the Meau put rice seed in water in their houses. After eight to ten days, when the rice germinates, it is taken to small rice fields. In the third month the large rice fields are laid out. The men make dams for the water. In the fourth month, the rice plants are transplanted to these large fields; in the sixth month the rice blooms, and in the ninth month it is harvested. It is threshed at night."

241 If the Meau lay out separate fields, the following plants, which I enumerate in the sequence of their periods of cultivation, are planted and sowed: sugar cane, yams, rice, and at the same time cucumbers, radishes, and beans, and finally maize, poppies, leafy vegetables, tobacco, and onions. Furthermore, sesame, buckwheat, and sorghum are cultivated.

251 After the harvest, all the field produce is conveyed by the Meau to their village and put in the dwelling. Special storage houses are set up only if the harvest was very rich. The store of seed is carefully cleaned and piled up on a shelf over the fireplace so that the smoke will keep off insects and harmful germs.

241 [243] [249] Depending on the fertility of the soil, rice fields bear from one to three years. There are poppy fields, however, such as I myself came across, that still produced a satisfactory yield even after twenty years of utilization. If a field becomes exhausted, it is allowed to lie fallow until the forest trees that subsequently grow have suppressed the weeds.

/357/ The reason for abandoning a field is generally the exhaustion of the unfertilized soil. The growth of weeds, however, a reason for abandoning fields which is cited by other authors, plays only a minor role among the Meau in Thailand. It is considerably less tiresome to clean the weeds out of a field than to clear tall virgin forest with primitive tools. All the plants mentioned are cultivated in accordance with established agricultural customs.

/358 cont./

• 249 2. Poppies. The Meau cultivate three different types, which are recognizable by the color of their flowers. Accordingly, one distinguishes white, red, and purple poppies. At the end of June they are sowed in soil which has been loosened with digging sticks. Tobacco, spinach-like vegetables, or [244] onions also grow in the poppy fields at the same time, which further increases the great importance of the poppy fields for 249 the Meau. Six months after the sowing of the poppies the 276 making of opium begins. For this the nearly ripe poppy heads are slit (Ill. 73)[1] with a three-bladed knife (chapter, "Food and Stimulants," Fig. 289). A whitish juice, the opium, oozes out and is carefully collected. After it has been properly [439] treated, it represents the most valuable article of trade of the Meau. After the opium harvest comes that of the now ripened 249 poppies, which are particularly valued as food on account of [262] their high oil content. Moreover, poppy fields, as was said, can be laid out on old, harvested maize fields, so that the least amount of land is required for their cultivation. If one adds to that the fact that mixed poppy fields remain productive for ten to twenty years, depending on the fertility of the soil, it may be said that they, next to the rice fields, certainly constitute the most important agricultural production area of the Meau.

3. Sugar Cane. Early in May the Meau set out six types, which ripen at different times. Furrows about 17 to 18 centimeters deep are made with the hoe (Figs. 269 and 270) 90 centimeters apart, and the shoots are set out with the help of a setting peg at uniform intervals of about 30 centimeters. At the earliest, harvesting commences eight months after the ensuing cultivation. These sugar-cane beds are productive for three years on the average and then lie fallow.

244 4. Yams. As soon as the cultivation of sugar cane is ended, four different types of this potato-like tuber is planted. For this purpose small pits are dug about 80 centimeters apart, the /359/ pieces of the seed tubers, cut up according to the bud-eyes, are put in, and the pit is covered. The harvest of the early ripening types begins as early as four months later.

1 [see Cat 116, p573 - ANALYST]

39: Bernatzik--488 E-5 (1936-1937) 1947 AO1 Thailand
Miao AE5

/359 cont./

243 cucumbers in /360/ helping to bridge the most difficult periods in the nutrition of the Meau. For maize, rotation of the fields must take place after each year; as a rule, maize is followed in the next year by poppies of various types.

244 9. Leafy Vegetables. This is a matter of spinach-like plants of many kinds which are cultivated at the same time as the poppies. Their special importance for the Meau lies in their early initial harvest. It can begin as early as two weeks after sowing, whereas the principal harvest does not come to its final conclusion until months later, at the same time as that of the poppies.

249 10. Tobacco in two types is sowed, in the same way as the green vegetables, together with the poppies. The tobacco is harvested five months after cultivation.

244 11. Onions of two types, one white and one red, are known to the Meau. They are set in the poppy fields when the fine seed of the latter has already sprouted.

12. Sesame, from the seeds of which oil is obtained, is set out only after the cultivation of the rice and is harvested four months later. The sesame fields remain productive equally as long as the rice fields and finally lie fallow equally as long.

243 13. Buckwheat, to be sure, is likewise important for the Meau in Thailand, but it does not by far have the significance that Savina (1) gives it by putting it directly after rice and

1. II, p. 216.

maize. It stands out in that area even more impressively according to Lajonquière (2), who even speaks of two buckwheat

2. II, p. 310.

harvests a year, the first of which takes place in the fourth month, the second in the twelfth.

/360 cont./

243 14. Sorghum, negro corn, is of minor importance for Thailand, to be sure, but must be mentioned here for the sake of completeness. Sowing and harvesting take place at the same time as that of maize, which corresponds with the observations made by Savina (1) /see footnote 1 above/ in Tonkin.

244 In general the customs of the Meau here and there seem [184] to correspond with regard to agriculture. Lajonquière (2) /see footnote 2 above/ also mentions a number of kinds and varieties of vegetables, such as beans, peas, gourds, broad [243] beans, cucumbers, and in addition a kind of grass, called [252] "caolien," out of which the Meau there bake cakes. These field products, classified by the author under the name of "secondary cultures," /361/ are planted, according to his description, between the furrows of the maize fields and ripen at the same time as the latter.

351 Vegetables, aside from the large-scale cultivation in the fields, are also cultivated in gardens for daily use by the 241 Meau in Thailand. Lajonquière (1) noticed special house- [244]

1. II, p. 310.

gardens in Indochina: "In the gardens, which they arrange around the houses, the Meau harvest radishes, eggplant, [249] beans, peas, and also tobacco in sufficient quantities for their personal needs."

[184] The Meau in Thailand, to be sure, do not plant eggplant, but in the vicinity of their houses they cultivate in particular [245] bananas and fruit trees, such as lemon, lime, and in rare cases orange trees. According to the statements of the author just cited (2) "the houses of the Meau in Indochina, on the

2. Page 309.

other hand, are surrounded by a circle of fruit trees which are not fenced off on the outside." The multiplicity of the [114] kinds of fruit there is clearly expressed in a description by

/379 cont./

b) Stimulants

276 The Meau are passionate tobacco smokers, whereas snuff or the chewing of tobacco is unknown. Both kinds of tobacco
● 249 known to the Meau are at times mixed with the seeds of poppies and sowed with them at the end of May. The one kind, lŏ yŭm bĕ klē, is a low, weak plant with narrow, long leaves. The tobacco obtained from it, however, is considerably stronger than that from the second kind, called lŏ yŭm kŭ fō. Tobacco is harvested about six months after planting. The plant is cut off just above the root, the stalk with the lower leaves left on it is discarded, and the leaves that have been picked off are sorted. Those from the middle height of the stalk give a different quality of tobacco than those from the upper third. Now the leaves are dried and then put out in the dew for a night to moisten them. Then they are tightly piled on top of one another, rolled up together, and packed in green banana leaves, which are tied together. Then the tobacco undergoes a kind of /380/ fermentation process and, thus preserved, keeps up to two years. Immediately before use, it is cut up into small
276 pieces with a knife on a board (chapter, "House Furnishings, Household and Kitchen Utensils," Fig. 160).

Some of this cut tobacco, which is now ready for use is
[415] carried /Figs. 285-288 appear here/ by every Meau in a special little box of bamboo or wood provided with a cover (Fig. 285), in order to have it at hand for his pipe (Figs. 286 and 287). In addition, water pipes of bamboo are used (Fig. 288), which Lajonquière (1) confirms for Tonkin as well. The author also

1. II, p. 303.

informs us that the bowls of the "ordinary pipes" are made of stone, wood, or copper, while the generally long stem is made of porcelain.

/404 cont./

286 spinning is finished, they bleach the thread with lime and
[184] stretch it for weaving on primitive frames that are quite similar
[171] to those of the Thai and Chinese. It is believed that these frames are of Chinese origin. They make a coarse, wrinkled, and strong cloth, which they make soft and shiny by means of polished roller-stones."

[114] I must indeed oppose Savina's opinion that the looms of
171 the Meau are similar to those of the Chinese or of the other
[177] mountain peoples mentioned by him or are even of Chinese origin. At any rate, this is not true for the Meau in northern Thailand!

386 The strips of fabric produced on the looms are sewed to-
[294] gether by the Meau to make their clothing, after which the dyeing process or the art of batik work (already mentioned by
249 Yü Chuluan) commences. The dyestuff is obtained from a
386 leafy plant more than a meter high, not, however, indigo, that thrives near water in moist, swampy soil. The Meau plant the shoots in the same manner as they plant sugar cane. Since the plant is a perennial, it can be harvested year after year. The
386 cut, green plant is put in water for two nights and one day, then the plant parts are removed, slaked lime is added to the solution remaining, and it is stirred vigorously. Now four handfuls of this solution mixed with lime is added to a large trough of water, whereupon the dyeing can begin. This process is simple. The material is dipped into the water and carefully soaked completely. Then it is allowed to dry, is checked to see whether the desired blue shade /405/ has been obtained, and the process is repeated until the color is satisfactory.

386 Much more art and skill is required to provide the
531 material with batik patterns. For this a design in wax is put
[413] on the still undyed material by the women with a special instrument consisting of a wooden handle and a three-edged brass pen (Figs. 354 and 355), from the crevices of which the applied wax flows, and, to be sure, in such a way that the negative /Figs. 354-355 appear here/ of the pattern desired is drawn on with the wax. In doing this, the woman holds the